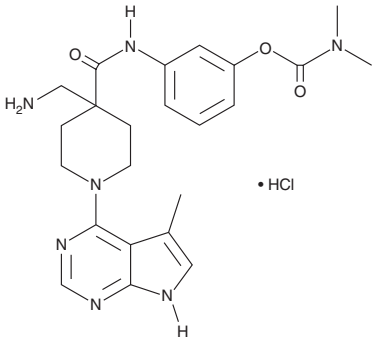
PRODUCT INFORMATION

LX7101 (hydrochloride)

Item No. 21209

CAS Registry No.:	2319882-48-7
Formal Name:	N,N-dimethyl-carbamic acid, 3-[[[4-(aminomethyl)-1-(5-methyl-7H-pyrrolo[2,3-d]pyrimidin-4-yl)-4-piperidinyl]carbonyl]amino]phenyl ester, monohydrochloride
MF:	$C_{23}H_{29}N_7O_3$ • HCl
FW:	488.0
Purity:	≥98%
UV/Vis.:	λ_{max}: 244, 297 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

LX7101 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the LX7101 (hydrochloride) in the solvent of choice. LX7101 (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of LX7101 (hydrochloride) in these solvents is approximately 3 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of LX7101 (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of LX7101 (hydrochloride) in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

LX7101 is a potent inhibitor of LIM kinase (LIMK) 1 and 2 and Rho-associated kinase 1 (ROCK1) and ROCK2 with IC_{50} values of 32, 4.3, 69, and 32 nM, respectively.[1] It is selective, showing no cross reactivity in a panel of binding assays including 78 receptors and transporters and 430 additional kinases, at a concentration of 10 µM. Topical administration (3 µl of 1 mg/ml solution) of LX7101 to the eye reduces intraocular pressure in a dexamethasone-induced mouse model of glaucoma.

Reference

1. Harrison, B.A., Almstead, Z.Y., Burgoon, H., *et al.* Discovery and development of LX7101, a dual LIM-kinase and ROCK inhibitor for the treatment of glaucoma. *ACS Med. Chem. Lett.* **6(1)**, 84-88 (2014).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM